ABSTRACT OF THE DISCLOSURE

[00037] A system and method for rendering a non-zero thickness line on a pixel-limited output device such that aliasing of the line is reduced. The edges defining a line segment are expanded to insure that any pixel touched by the line segment has its center included in the bounds of the line segment. The area of any pixel partially or fully covered by the expanded line is determined. If one edge of the line traverses the pixel, the area is determined according to whether a triangular or triangular plus parallelogram area is covered. If more than one edge of the line segment traverses a pixel, the area covered is computed based on the single edge case. With the area covered by the line segment known, the color or shading of the pixel is determined by linear interpolation between the line and the background.